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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,381	10/31/2000	Rajeev Dujari	1411	2342

7590 10/06/2004

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EXAMINER
ALI, MOHAMMAD

ART UNIT	PAPER NUMBER
2167	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/703,381	DUJARI, RAJEEV
	Examiner	Art Unit
	Mohammad Ali	2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 June 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *37-67* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *37-52* is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *53-67* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to the RCE filed on June 14, 2004.

The application has been examined. Claims 37-67 are pending in this Office Action.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 37-52 are drawn to a generating a plurality of subdirectory names, classified in class 707, subclass 2.

II. Claims 53-67 are drawn to directed to a data structure maintain mechanism, classified in class 707, subclass 101.

The inventions are distinct, each from the other because of the following reasons:

Inventions in Groups I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention in Group I has separate utility such as generating a plurality of subdirectory names. See MPEP § 806.05(d). Invention in Group II has separate utility and requires data structure maintain mechanism.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purpose as indicated is proper.

During a telephone conversation with Attorney, Albert S. Michalik (Reg. No. 37,395) on August 07, 2004 a provisional election was made without traverse to prosecute the invention of an apparatus storing the plurality to task/domain, claims 37-52. Affirmation of this election must be made by applicant in replying to this Office action. Claims 22-38 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant are advised that the reply to this requirement to be complete must include and election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors in no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an

> international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 37-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Forecast et al. ('Forecast' hereinafter), US Patent 6,230,200 B1.

With respect to claim 37,

Forecast discloses a computer-implemented method (see , comprising:

generating a plurality of subdirectory names, wherein each subdirectory name is random (see col. 8, lines 26-30, Forecast);

creating a plurality of randomly-named cache directories, one for each random subdirectory name generated (see col. 67, lines 40-47, Forecast);

storing a plurality of files under the plurality of randomly-named cache directories, each of the plurality of files having a predictable filename (see col. 2, lines 14-16, Forecast); and

automatically balancing the files among each of the plurality of randomly-named cache directories (see col. 67, lines 40-47, Forecast).

As to claim 38,

Forecast teaches receiving information corresponding to a new file to store (see col. 11, lines 47-48, Forecast).

As to claim 39,

Forecast teaches wherein automatically balancing files among each of the plurality of randomly-named cache directories includes determining which of the directories has a least number of files therein (see col. 5, lines 50-51, Fig. 14, Forecast).

As to claim 40,

Forecast teaches wherein automatically balancing files among each of the plurality of randomly-named cache directories includes determining when a randomly-named cache directory has a number of files stored therein that exceeds a Limit (see col. 5, lines 50-51, Forecast).

As to claim 41,

Forecast teaches receiving information corresponding to a new file to store, determining that each of the plurality of randomly-named cache directories has a number of files therein that exceeds a limit, and automatically creating at least one new randomly-named cache directory (see col. 20, lines 10-13, Fig. 3, Forecast).

As to claim 42,

Forecast teaches for each file, tracking which of the plurality of randomly-named cache directories that file is stored in (see col. 2, lines 15-17, Forecast).

As to claim 43,

Forecast teaches maintaining a count of a number of files stored in each of the plurality of randomly-named cache directories (see col. 2, lines 15-17, Forecast).

As to claim 44,

Forecast teaches wherein at least one of the plurality of randomly-named cache directories caches content downloaded from a server (see col. 2, lines 15-17, Fig. 6, Forecast).

As to claim 45,

Forecast teaches maintaining a table including sewer content references and filenames covered therefrom (see col. 2, lines 15-17, Fig. 20, Forecast).

As to claim 46,

Forecast teaches wherein automatically balancing files among each of the plurality of randomly-named cache directories includes determining a randomly-named cache directory having a lowest file count, and moving files from another randomly-named cache directory to the randomly-named cache directory having the lowest file count (see col. 2, lines 15-17 and Abstrat, Forecast).

As to claim 47,

Forecast teaches maintaining an index including a directory name for each of the plurality of randomly-named cache directories, and for each directory name, maintaining a file count of a number of files stored therein (see col. 2, lines 56-60 et seq, Forecast).

As to claim 48,

Forecast teaches comparing the number of files in one of the pluralilty of randomly-named cache directories having the least number of files therein against a predetermined threshold value, and based on the comparison, generating at least one additional randomly-named cache directory (see col. 2, lines 15-17, Fig. 2, and Abstract, Forecast).

As to claim 49,

Forecast teaches maintaining an indexed directory table including data corresponding to each of the plurality of randomly-named cache directories therein, and maintaining a table including file information and corresponding file directory information for each file in one of the plurality of randomly-named cache Directories (see col. 8, lines 10-15, Fig. 3, Forecast).

As to claim 50,

Forecast teaches wherein automatically balancing files among each of the plurality of randomly-named cache directories includes moving at least one file from one of the plurality of randomly-named cache directories to another of the plurality of randomly-named cache directories following deletion of at least one other file (see col. 8, lines 10-15, Fig. 3, Forecast).

As to claim 51,

Forecast teaches maintaining a file count of a number of files stored in each of the plurality of randomly-named cache directories, and wherein automatically balancing files among each of the plurality of randomly-named cache directories includes moving at least one file out of one of the plurality of

randomly-named cache directories when the file count maintained therefor is below' a threshold value (see col. 8, lines 10-15, Fig. 3, Forecast).

As to claim 52,

Forecast teaches removing one of the plurality of randomly-named cache directories based on the file count maintained therefor (see col. 6, lines 30-35, Fig. 1, Forecast).

Remarks

Forecast discloses providing at least two selected directories for storing files as, providing intermediate storage for the data transferred between the channel directors and the disk directors, the cache memory also provides intermediate storage for control information transferred among the channel directors and disk directors, see col. 8, lines 26-30.

Forecast discloses 'automatically balancing files among each of the selected directories' as allocation balance is used as a background process to keep open paths to datasets. The dynamic model automatically creates to collect information about what components are installed in the file server, the resources of the installed components, and connections between the installed components, see col. 67, lines 41-47.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is (703) 605-4356. The examiner can normally be reached on Monday to Thursday from 7:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (703) 305-9790 or Customer Service (703) 306-5631. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for any communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

Mohammad Ali

Patent Examiner

AU 2177

MA

September 30, 2004